ABSTRACT

A polymetaphenylene isophthalamide porous hollow fiber membrane is produced by extruding a film-forming solution comprising polymetaphenylene isophthalamide, polyvinylpyrrolidone and an inorganic salt through a concentric double annular spinning nozzle while keeping the film-forming solution at 70℃ or higher, thereby conducting dry-and-wet spinning, followed by moisture retention treatment, where it is preferable to subject the resulting porous hollow fiber membrane obtained by dry-and-wet spinning to heat treatment in water at 80℃ or higher before the moisture retention treatment. The polymetaphenylene isophthalamide porous hollow fiber membrane resulting from wet heat treatment under wet heat conditions at the temperature of 100℃ and the humidity of 80% for 1,000 hours or more has a strength at break of 10MPa or more and a elongation at break of 80% or more, where the elongation at break can keep at least 80% as high as that before the wet heat treatment, and also has distinguished resistance to moisture and heat and humidifying performance, so that the membrane can be used as an effective humidifying membrane for polymer electrolyte fuel cells, etc.